

CURSOR

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NEWSLETTER of the COMMODORE COMPUTER USERS GROUP (QLD) INC.

V/AMIGA EDITION

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MEETINGS - WHERE & WHEN

AMIGA MEETING: Sunday 2nd August 1987 (1pm - 5pm) in the *Playground & Recreation Association Headquarters Building* in Love Street, Spring Hill.

*** MARK CONSTABLE will demo AMIGA MUSIC, MIDI and SYNTHESIZERS ***
*** STEVE McNAMEE will talk on the LATTICE 'C' COMPILER ***

Amiga Library open from 1.30pm - 2.30pm.
Bring your own computer equipment to copy our Public Domain Disks!
Opportunity to purchase Blank Disks and other Accessories.
For further information: Ph. Steve McNamee - 262 1127 (a.h.), or
Ph. Bruce Wylie - 359 9779 (a.h.)

8-BIT MEETING: Tuesday 4th August 1987 in the *Bardon Professional Development Centre* in 390 Simpsons Road, Bardon.
Entrance through the Car Park in Carwoola St.
Doors open 7pm (library), Meeting starts at 8pm sharp. Library closes at 9.30pm.

***** ANNUAL GENERAL MEETING *****

For further information: Ph. Norm Chambers - 341 5651 (a.h.)

GOODS & SERVICES

BLANK DISKS 5,25" (DS/DD) - \$12.00 per 10 (+ \$2.00 Postage) - [No Libr. Case]
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PUBLIC DOMAIN DISKS FOR AMIGA 3,5" - \$6.00 ea (+ \$2.00 Postage for up to 5 Disks)
BLANK DISKS FOR AMIGA 3,5" - \$40.00 per 10 (+ \$2.00 Postage) - [No Libr. Case]
DISK BOXES for 3,5" disks: *Temporarily Unavailable*
"AMIGA DOS SUMMARY" - \$3.00 ea (+ \$1.00 Postage)
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Cheques to be made out to: C.C.U.G. (Q) Inc.

Have you paid your 1987/88 Membership Fees yet? #
Our Secretary would love to hear from you soon! #

EDITOR'S NOTES

With this issue we start the fourth year of CURSOR, although this is only the second issue of the Amiga-specific edition. For simplicity's sake we have decided to carry on with the existing numbering system - continuity and all that.

Our Amiga group is now just over twelve months old. In retrospect we feel that the first six months were a bit 'messy' (there's a nice understatement for you!), but we are now getting our act together. An Amiga committee is in place, we have found new premises for our meetings (long overdue), both our public domain- and book and magazine library are growing, and a series of talks have been planned for forthcoming meetings. With the arrival of the A500 and A2000 models (particularly the A500) we are ready for the anticipated increase in our membership. My own estimate is that by the end of this year we will have at least 150 Amiga owners on the books. I'm not renowned for the accuracy of my forecasting, but for once I may well be on the conservative side.

In this issue we publish more Fish disk listings (67 - 80); which brings us right up to date. The trickle has certainly become a flood by now. I have also 'filched' some pages from the UK "ICPUG" newsletter, which has some useful articles for both beginners and more advanced users.

Our Coordinator, Steve McNamee has written a very useful utility program for single disk system users in 'C'. The complete listing of the program is included in this issue. Perhaps there's somebody out there amongst our C programmers who'll improve on Steve's program. I'm sure that Steve will be only too pleased if his programming efforts spur somebody else on to 'have a go'.

We are of course still looking for more contributions from local members. I have no trouble filling up this newsletter with articles from other (often overseas) newsletters, but we would much rather have local contributions only. As an example, at our last meeting it became apparent that a lot of our members are now using 5.25" disk drives. Now, some of these are bought, but I know that several of our members have made their own. Now surely there's some material here for an article to inform your fellow members? Amiga information is currently the commodity in very short supply locally, and believe you me, every bit of info helps.

We also need reviews. These don't necessarily have to be reviews of new software (or hardware). You may have been using an application program for some time and have discovered some new features or hidden snags (the latter most likely!). How about sharing that knowledge with your fellow members? And how about some game reviews? I'm not very game orientated, but this newsletter covers the needs of all our members, and a regular games column would certainly find a place in CURSOR.

Another area that needs investigation in depth is printers. This is one of my favourite subjects! Have you recently bought a new printer? How about a review, with a test printout of all its features (new ribbon please)? We know that a few of our more wealthy members have purchased 24 Pin dot matrix printers. Do they really give better results than a conventional 9 Pin dot matrix printer? And what about printer drivers for these better printers, and graphics dumps? Just get the old word processor out and start writing!

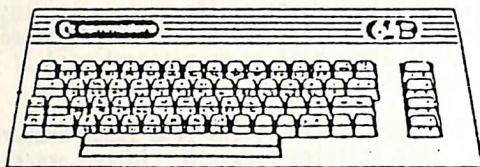
Ralph De Vries

commodore COMPUTER

PARCOM PTY. LTD.

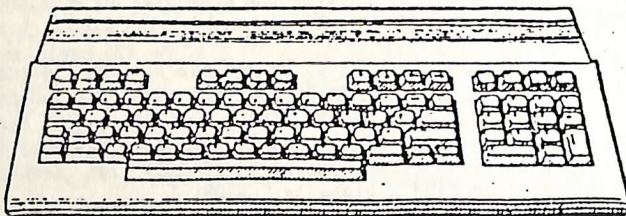
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R A N D O M B I T S

AMIGA MEETING (5th July)

Well, we are back in Love Street, Spring Hill again! One of our former stamping grounds, it will now be used for our Amiga Special Interest Group meetings, till we grow too big again. Fortunately there's enough space, but we will still require more trestle tables to house all Amigas. We were very pleased with the excellent roll-up at this meeting. It promises very well for the future. After the introductory talks by our worthy 'leaders' we had two interesting demos. Bruce Wylie talked about Amiga Basic and his Estimating Program, which keeps on growing and growing! He was later joined by Ken Clem who is currently working on a very nice Student Records program, which promises to become a model of its type. Neither program is quite finished yet, but the important thing is that these gents are really doing something with their Amigas, and we can only but applaud their efforts. Next it was the turn of our Sunshine Coast member, Harvey Riddle, who had to bring a van to carry all his sound gear! Harvey had made a demonstration tape of several music examples, culled from a variety of Amiga sources. Interspersed with some digitized speech examples, the tape was primarily made to show how good the Amiga can sound when the output is re-routed via an external high fidelity system. If you have only heard the Amiga's sound through the monitor's loudspeaker you'll be pleasantly surprised how good the actual quality is through a 'proper' system. We hope to have copies of Harvey's tape for sale in the near future - than you too can blast your family and friends out of their chairs with Amiga sound! We will take up the theme of sound at next month's meeting when Mark Constable will demonstrate the Amiga in conjunction with a MIDI interface and an external synthesizer for some real live Amiga sound. See you there!

MAIN MEETING (7th July)

We have been requested by quite a few members to give them at least some information on what's happening at our 'other' meeting. Notice that the '8-Bit meeting' is called the 'Main Meeting'? Well, as an Amiga owner you may well disagree with this appellation, but as the majority of our members are still 8-bit computer owners we will go on calling this meeting the Main Meeting, but this could change in due course! The first meeting in our new financial year is the one where a lot of members pay their subs. Perhaps our request for members to mail their subs is being heeded at last as there wasn't as big a rush as in previous years. Nevertheless four of us were kept busy renewing subscriptions. After the normal 'waffle' by our committee members Greg Perry gave a talk on the SuperScript word processor, which was of sufficient interest to go on till closing time.

A WARNING

The well known database program Superbase uses a 'key' (also known as a 'dongle') for program protection. The program disk itself is not protected, but the program won't run without the dongle in place. Now dongles, like any other form of program protection, are a pain in the proverbial - one forgets to insert them, or worse, you lose the blighters. Recently however it was found that one of the commercial copy programs (Marauder II) allowed you to make a copy of Superbase which no longer required the dongle to run it - great stuff. However for some time now we have had reports that the un-dongled version causes problems with several program functions. Your editor, as an example, ended up with 2 complete copies of a membership file.

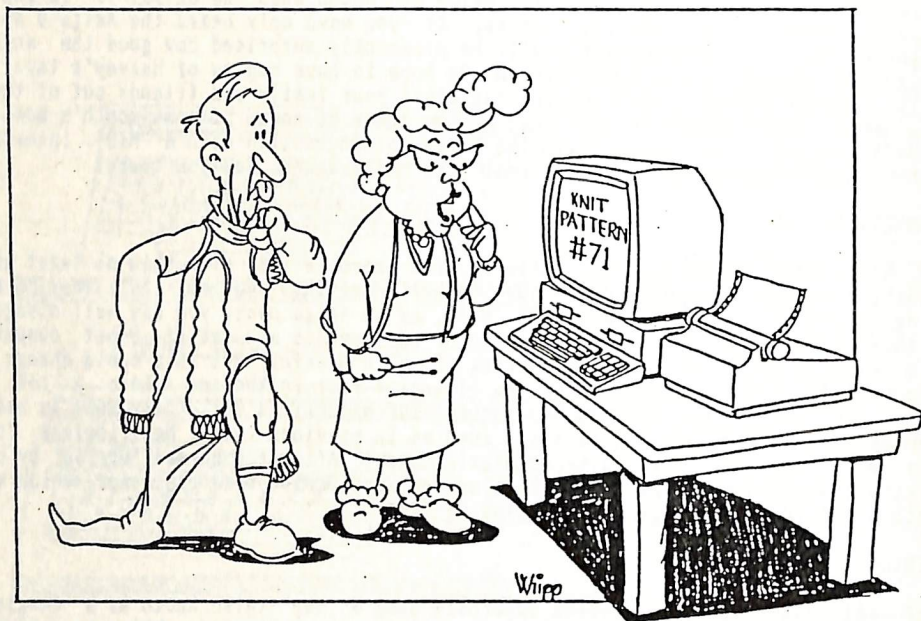
Number one was called 'Members', and number two was called 'MembersMembers'! Now, I'm not sure if this was caused by the undongled version, but I have gone back to the disk which requires the dongle, and haven't had any problems since. There have been several reports since from local and overseas BBS's, which seem to indicate that there are problems with the non-dongle version. So, if you do use this version you may be well advised to go back to the original. Better be safe than sorry.

MUSICAL CHAIRS

Nigel Shepherd, formerly the Chief of Commodore Business Machines in Australia, and subsequently General Manager of Commodore North America, recently got the boot, concurrently with Tom Rattigan, the Chief Executive Officer of Commodore. Rumour has it that the real 'chiefs' still weren't happy with their financial performance.

Apparently Nigel hotfooted it to his erstwhile Commodore boss, Jack Tramiel (now the chief of Atari), and got the job of launching the new Australian branch of Atari! Apparently Mobex, the former distributors of Atari never did much of a job in spreading the gospel according to Saint Jack.

As Atari is on a real price war footing with Commodore in the USA and Europe, (ST versus Amiga), and as Commodore has called all the shots here in Australia up till now, we can look forward to some very interesting price battles indeed, which financially should benefit both Atari ST and Amiga owners.



"YOU DON'T SUPPOSE THIS THING HAS DEVELOPED A SENSE OF HUMOUR?"

JITTER-RID - GOOD NEWS

Following on from last month's bit on the Australian availability of this screen to reduce the 'jitters' in hi-res and interlace modes, I'm pleased to report that

Computer View in Bundamba stocks this item at a RRP of \$34.95, which is a lot better than some of the exorbitant prices quoted from Southern sources.

There's no doubt about it that it does reduce the jitters in hi-res mode, particularly if you work with a light background. If you work with the hi-res version of some desktop publishing programs, or with DPaint for example, you may well find it a worth-while investment. You can leave it on permanently, or remove it again for normal use (it can easily be removed with its two Velcron fastening strips).

Basically JitterRid is a neutral density screen, which reduces the brightness range of your screen display. (Take this neutral density with a pinch of salt. I'm sure that I detected a bias towards green in the screen.) Opinions vary as to its usefulness. Some people consider it useless, others - myself included - find that it makes the hi-res mode a lot more comfortable to use. I don't regret having purchased the screen, but if an Australian manufacturer decided to make one the price could be a lot closer to the US price of \$15.00!

TRY THIS FOR FUN

If you have the 1.2 version of Kickstart/Workbench you can try the following:

Load the Workbench, but don't open any icons/windows. Now press simultaneously both Shift and both Alt keys. Now this is where it gets tricky - if your fingers are all tied in knots get a friend or relative to press the F1 key down while you keep on holding those four other keys down! You will see on the title bar of the Workbench the names of some of the people who designed your Amiga. Now press down in turn all other function keys and you'll see more names involved in aspects of the design of your Amiga!

MEMORY EXPANSION - A REPORT

In the July '87 issue of the Canadian "Transactor" magazine Tim Grantham comments on the "INSIDER" memory expansion board:

"The Insider mounts inside the Amiga and attaches directly to the 68000 bus. In addition, it is configured to lie at the \$C0000000 address reserved under 1.2. It is true Fast Ram with no wait states, unlike some other internally-mounted Ram expansion boards that piggybank on to the video memory chips. Because it lies in the reserved area of memory, a full 8 MegaBytes can still be added on the expansion bus, bringing the total possible amount of memory on the Amiga to 9.5 MegaBytes. The unit is one of the few memory boards that will work with the Sidecar.

Some have expressed concern that it may prevent other units on the expansion bus from working because the Amiga bus is rated only for one "F" load, which would be absorbed by the Insider. However, the manufacturers say that they have buffered all except the data lines. Larry Phillips has one installed in his machine and says he has no trouble driving an external memory board or the Sidecar. He feels that there's probably enough leeway in the specs to allow units on the expansion bus to coexist with the Insider. I must admit, it would be very nice to have a 1.5 Meg Amiga with a battery-backed clock/calendar that doesn't have all that junk hanging off the side"

So far Tim Grantham. The "Insider" is manufactured by Michigan Software in the USA where it sells for \$350.00 US, or \$595.00 Canadian. We have seen an advert in the Australian Commodore Review for \$649.00, although we have also heard prices as high as \$899.00!!! We have also heard that there could be certain difficulties installing this board in older A1000's. It may also be necessary to remove part of the casing of the built-in drive to fit the board. Please note that we place this information at your disposal without having either seen or tested the product. Caveat Empor!

---oo0oo---

DISK LIBRARY (FISH DISKS 67 - 80)

This is disk 67 of the freely distributable AMIGA software library.

AmCat Shareware disk cataloging program.
AnigaSpell Very nice intuition oriented shareware spelling checker, version 2.0.
Bouncer A 3-D simulation of a bouncing ball written in Multi-Forth.
Comm Another nice terminal program. Version 1.33, binary only.
Dux5 Latest version of directory utility which is a descendant of the original dirutil program by Chris Nicotra.
HexCalc Nice little hex/oct/dec/bin calculator and converter.
Icons A collection of some icons for general purpose programs and some particular programs.
Mandala A mandala graphic program with sound, sort of Eastern music. Binary only.
PersMalt Demo version of shareware personal/personnel file manager.
RSLClock Yet another nice little clock utility that can sit around in your title bar. Lots of options. Version 1.3.
RTCubes A little graphics demo that shows 16 3D cubes in a 3D space.
Wheel Nice little "Wheel of Fortune" type game, written in AmigaBasic.

This is disk 68 of the freely distributable AMIGA software library.

This diskette contains the latest Aniga version of MicroGNUMacs (HG 1b), a small but powerful text editor.

This is disk 69 of the freely distributable AMIGA software library.

Asm68k Full featured macro assembler, version 1.0.3, bin. only. Well documented.
BlitLab Blitlab is a program which lets you experiment with the blitter.
Conman A replacement console handler that provides line editing and command line history. Is completely transparent to any application program that uses CON: windows. Programs that use RAW:input are not affected. VERY useful.
Console Console is a try at a new set of routines to get around some of the problems with the standard system routines, and includes some simple graphics routines. Includes source
Dk A little display hack, inspired by Leo's gems.
Frag Reports the number of free blocks of size $2^{(n-1)}$ to $(2^n)-1$ for n up to 24 (blocks of max size 16Mb-1).
IconType Change the type of an icon after editing with IconEd. Types are Disk, Drawer, Tool, Project, Garbage, and Device.
Make Public domain make from mod.sources, Volume 7, number 91. It has been cleaned up, Manx'ified, and some new features added.
MonProc A simple program to allow you to monitor any process for packet activity.
MouseClock Turns your mouse pointer into digital clock with updates once per minute.
Sb Structure browser, that displays system structures via pointers found in other structures. You start from IntuitionBase and go from there.
Spew Program which generates amusing 'National Enquirer' type headlines. Works from a 'rules file'. Includes source.
Spool The SPOOL system consists of 3 programs: A queue manager, a printer driver, and a SPOOL request program. Version 1.2, includes source
Wc A "word count" program, ala Unix's wc, that is faster because it doesn't count what you don't ask for.

This is disk 70 of the freely distributable AMIGA software library.

AmigaMonitor Dynamically display the state of the machine, including open files, active tasks, resources, device states, interrupts, libraries, etc.

Arc The ubiquitous compressing archiver program that has become the de facto standard for distributing binaries and multi-file postings on most BBS's.

BlackBook Keeps track of those important phone numbers and addresses.

DoTil Lists, in alphabetical order, all files on any two directories, showing file size, creation date/time, and amount of free disk space. Also copies, renames, or deletes files and/or directories, and moves files from one directory to another.

GravityWars The object of this game is for one player to hit the other player's ship with a missile, before being hit yourself. The ships and planets don't move, but aiming the missile in the presence of gravity fields and black holes makes hitting your target difficult.

Jobs A alternate user interface to Workbench or CLI. Version 2.1, binary only.

Lens This program magnifies a small area surrounding the pointer and displays it in a separate window.

Life-3d A 3d version of the classic cellular-automaton game.

Logo A logo interpreter, with user interface like the Apple II logo.

SetKey Keymap editor, version 1.0 demo.

Vpg Video Pattern Generator. Creates displays useful for adjusting monitors and setting up live shots with center crosshair, frame, dots, H. & V. lines and an adjustable rectangle. Version 1.0.

This is disk 71 of the freely distributable AMIGA software library.

AirFoil Airfoil generator utilizing the Joukowski transformation.

AmiBas Some miscellaneous AmigaBASIC programs, including a 3D plot program, a kaleidoscope, a C-A logo drawing program, a file comparison utility, a string search program, etc. Includes source.

Blocks A variation of "lines", but with variable color blocks.

Comm Another nice terminal program. Version 1.34, binary only.

DiskX A handy utility for poking around in the guts of an AmigaDOS file system.

Fpic Fpic is an image processing program, designed specifically to be used in conjunction with digitized lo-res black & white IFF picture files.

IconMk Iconmaker builds icons for files that were created without them.

Icons Various new icons from several sources.

NewFonts Two new fonts; shal1t18, an electronic circuit element font, and ibm5, a PC like font, different from that for Sidecar.

PetCLI An AmigaBASIC program that allows editing in CLI command lines (similar to the PET and MYCLI). Includes source.

PWDemo Demo version 1.2 of the commercial product PowerWindows.

Rot Program which generates and displays 3D objects. Consists of two pieces, an object editor and an action editor.

TimeSet Handy little utility to set system time from the workbench environment, without resorting to preferences.

This is disk 72 of the freely distributable AMIGA software library.

It's been quite a while since the last disk with any pictures, so this one is just chock full of them. There are HAM pictures, high resolution B&W digitized pictures, and some interesting freehand drawings. Has a little of everything...

This is disk 73 of the freely distributable AMIGA software library.

- Add** Lets you create keyboard shortcuts for selection of menu items in programs where the author did not make provisions for such shortcuts, or chose ones that disagree with you.
- AutolconOpen** Example code to fool WorkBench into thinking it is receiving mouse inputs that select and open icons. Includes source.
- Dio** A module which makes it very easy to use EXEC devices, such as the 'serial.device'. It's generic and can be used with any EXEC device.
- Dissolve** A program like ViewLBM, but the image slowly coalesces as pixels are added in random patterns.
- DTerm** Small, flexible, terminal program with intelligent data mapping, intelligent keyboard mapping, dynamic menus, intelligent command language, asynchronous IO, duplex control, and a state machine structure allowing you to build any automatic control structure you wish.
- Expose** Program which will automatically cause all screen drag bars and screen depth-arrangers to become exposed.
- Lit** Lit filters a file to stdout, showing all chars in an unambiguous format.
- Lmv** This shareware program, submitted by the author, is called "Long Movie". It loads up to 100 IFF graphics files and displays them in forward or reverse order, at up to 19 frames per second.
- MouseOff** Mouseoff will cause the mouse pointer to disappear and then reappear if mouse movement is detected. It will disappear again after 10 seconds of no mousing around.
- ParOut** An example that uses the parallel port resources (ciaa.resource and misc.resource) to access the parallel port directly.
- PenPalFont** A font which will make your six year old feel right at home in a CLI window. Cute.
- RunBackGround** Ancient history, but when I went looking for it on my disks, it was apparently something I missed. This program performs a function similar to that performed by RunBack on disk number 66.
- SnapShot** A small utility for dumping screens. This one works like POPCLI and stays dormant until you press Ctrl-Esc.
- TypeAndTell** Example program that demonstrates installation of an input device handler before the Intuition one.
- Xplor** A program that scans all the system lists that start in ExecBase and prints out their names and addresses at which they start.

This is disk 74 of the freely distributable AMIGA software library.

- Cled** A simple command line editor which allows you to edit your commands before and after they are processed.
- Control** Program which provides finer control over the printer device.
- Dme** Version 1.25 of Matt's text editor. Dme is a simple WYSIWYG editor.
- DropShadow** A program that makes your WorkBench windows have dropshadows.
- Funds** AmigaBASIC program to track the prices of mutual funds or stocks.
- Less** Like Unix "more", only better.
- Makemake** Reads C source files & constructs a vanilla makefile in the current dir.
- CAD** An object-oriented drawing program, version 1.2.4.
- Random** Simple random number generator in C. Includes source.
- TDebug** Monitor a device by intercepting the EXEC SendIO and DoIO vectors.
- Unit** Units conversion program, including a chart option which allows you to create charts of conversions. Nifty.
- XCopy** A replacement for the AmigaDOS copy command.

This is disk 75 of the freely distributable AMIGA software library.

Bezier Simple programs to allow you to fool around with Bezier curves.
BSplines Simple program to fool around with B-SPLINES.
Comm Source release for comm version 1.34.
Copy A replacement for the AmigaDOS copy program that is upwardly compatible.
Diff A simple version of diff. Includes source.
DuM2 A version of the ever popular directory utility (dirutil) but this one is written in Modula 2 and includes source.
Eless A faster directory lister, that also sorts entries and displays directories in the current cursor color
Fd A modified version of Leo's "eless".
HardCopy A neat little program that creates a hardcopy transcript of any CLI session (like the unix "script" program).
MouseOff Enhanced and smaller version of MouseOff released on disk number 73.
SetFont Program to change the font used by a workbench screen. Version 2.0.
SpeedDir Another faster directory lister type program.

This is disk 76 of the freely distributable AMIGA software library.

This is disk 1 of 2 of Chris Gray's Draco distribution for the Amiga.

The disk is unchanged except for the following:

(1) I have added this file, README.list76.

(2) I have added the standard distribution info file, README.dist.

Note that this disk was named "Draco SYS". I have elected to keep that name, rather than using the usual "AmigaLibDiskXX" convention for disks in my library, to avoid requiring users to rename the disk before using it.

This is disk 77 of the freely distributable AMIGA software library.

This is disk 2 of 2 of Chris Gray's Draco distribution for the Amiga.

The disk is unchanged except for the following:

(1) I have added this file, README.list77.

(2) I have added the standard distribution info file, README.dist.

Note that this disk was named "Draco Other". I have elected to keep that name, rather than using the usual "AmigaLibDiskXX" convention for disks in my library, to avoid requiring users to rename the disk before using it.

[NOTE: Disk 76 & 77 contain DRACO, a new language for the Amiga, written by Chris Gray - These two disks also contain full documentation.]

This is disk 78 of the freely distributable AMIGA software library.

Cycles A simple but enjoyable game inspired by the cycle game in the movie "Tron".
EOMS Experts Only Mercenary Simulator. A neat (and tough!) PD game that was originally developed for eventual commercial release.
MandelVroom A new Mandelbrot picture generator with some neat features.

This is disk 79 of the freely distributable AMIGA software library.

AsmTools Some CLI type tools, written in assembler.
AssignDev Assigns multiple names to a given device.
AuxHandler Example of a dos handler that allows use of a CLI via the serial port.
Cmd Cmd redirects the serial.device or parallel.device output to a file.
Info Replacement for the AmigaDOS info command. Includes source.
Kill Removes a task and as much of its resources as possible.
M2Error M2error used to display errors produced by the TDI Modula-2 compiler.
MonProc An enhanced version of the process packet monitoring program from disk 69.
Mounted A program to run from CLI scripts to find out if a disk is mounted or not.
Nro Another roff style text formatter. Includes source.
ParTask Example program for finding the parent task of your current task.
QueryAny Simple program for use in CLI scripts to query for yes/no decisions.
ScnSizer Sets the preferences data for increasing the window bounds.
SharedLib Working example of how to build a shared library.
Task Simple example of how to use CreateTask. Includes source.
Uw Unix Windows client for the Amiga. Version 1.00, includes source.
Who Lists tasks on the ready and wait queues. Includes source.

This is disk 80 of the freely distributable AMIGA software library.

AniGazer Compute a view of the night sky, using a database of 1573 stars, for any date, time of day, and latitude.
CardFile Study aid card file program written in AmigaBasic.
Conman Extremely useful replacement for the standard console handler.
IMandelVroom A slightly modified version of Kevin Clague's mandelbrot pgm (disk 78).
NewDemos Some new demos, replacing the standard "lines" and "boxes" demos.
Othello Othello game, binary only.
PrintText Program to display ASCII text files on the screen with scrollbar, arrow gadgets, word-wrap, a search function, speech, IFF picture loading.
PrtDrvGen Program to automatically generate custom printer drivers. Version 2.2b.
RainBench Program which cycles the hardware color register to get interesting effect on your workbench screen.
ShortCut A utility that collects keystroke sequences and allows you to replace them with a single key stroke. Binary only.
ShowPrint A full-feature IFF picture file screen dump utility.
Sizzlers A series of graphics demo programs. Version 1.7.0, binary only.
Timer Creates a small window containing a timer. Version 1.5, binary only.
Tools Some miscellaneous tools, including a memory editor, memory disassembler, ascii chart, and calculator.

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With this listing we are right up-to-date again with the 'FISH' Public Domain disks. To our new Amiga members the sheer volume of PD disks must be somewhat overwhelming, to say the least! My advice to newcomers is always to start with the newest disks, as quite a few programs go through a series of updates. Good examples of this are some of the Terminal programs, Directory Utility programs and Text Editors.

Perhaps one of these days one of our members might care to write a summary of "The Best of FISH". An interesting exercise indeed!

Editor

HOW I ORGANIZE MY DISKS

by Ralph De Vries

At home I'm known as a 'fusspot', a charge I always deny, although I must admit that I like things neat and tidy! My Amiga disks are no exception to this rule. I'm often horrified when I see people's higgledy-piggledy collections of disks. How can they ever find anything?

Well, if you are in this category and feel guilty about your 'messy' collection, follow my wise words and become organized!

You need the following: A roll of self-adhesive labels - the size I use is 44mm x 68mm. Buy those in rolls only, they are much cheaper than the sheets of labels. A packet of Fastonall labels size 19mm x 63mm (\$1.45 per sheet of 50 - too dear, am still looking for a cheaper alternative). A collection of high-lighting pens (I use 6 different colours). Your local newsagent/stationer or supermarket will have most of these items. A typewriter or computer printer comes in handy if you want to be really neat!

I don't use the labels supplied with the disks, because every brand of disks uses their own system of colour coding and they aren't very consistent. The high-lighting pens are used for colour coding the disks into categories. I use the narrow labels for this purpose, which are put around the spine of the disk. These are now coloured with the high lighting pens. As an example I use dark green for graphics programs, light green for sound and blue for word processing programs. You can build up your own selection according to your needs. I use plain white labels for the operating system disks (Kickstart, Workbench etc.).

Next I write the name of the disk on the spine with a fine tipped felt pen, so that I can see the disk's name when it is inserted in the drive - this I find very handy because at times you forget which disk is in the drive.

The large labels go on the front face of the disk of course! They have the name of the program doubly underlined (that's in case you are half blind). On the next line of the label comes my 'piece-de-resistance', of which I am very proud. Every disk starts with one of the following words: WB or KS or CLI or DATA. That means of course that the particular disk is either loaded from the WorkBench, KickStart, the CLI, or contains Data pertaining to a particular program or programs. In the case of those few disks which I have which will only run from Kickstart 1.1 the designation '1.1' is listed following the KS.

The advantages of this simple system are that, because of the coloured strips, you can immediately see where every disk belongs in your disk box. The additional information on the main label will tell you how the program is loaded - important for people who have such huge collections that they don't know what every disk does.

Every so often though you will come up against a disk that won't fit in a clear cut category. Is a desktop publishing program a graphics program or a word processing program? Easy ... you make your coloured label in half graphics colours and half word processing colours - problem solved. If you want to sub-categorize a lot of games disks for example you could again use a combination of colours. Just use your own imagination.

I haven't spoken about cataloguing disks. Personally my disk collection isn't large enough to bother - besides disk catalogues, particularly the alphabetically arranged ones, need updating for ever more. However if you do feel that you want to catalogue your disks there are several reasonably good programs available amongst our Public Domain disks.

Well, there you have it. I like my system, as it works for me. If you can't be bothered that's okay by me too. At least they won't call you a 'fusspot'!

R U N N I N G C O M M E N T

by Ralph De Vries

Expansion and all that

This is an occasional column in which you and I can voice our thoughts and opinions on matters related to the Amiga. On this particular occasion I would like to write about 'expansion', or 'how to get rid of your spare pocket money in a hurry'.

In a recent issue of the 8-bit edition of CURSOR I did a comparison on pricing a Commodore C-64 outfit against an Amiga A500 outfit.

In round figures an outfit consisting of a Computer, Diskdrive (built-in, in the case of the Amiga of course), Monitor and Printer would cost you \$1500.00 for the C-64 against \$2100.00 for the A500. Not a very large difference you will agree. However these figures are rather deceptive, because the majority of C-64 owners have started with a computer and gradually added all the other peripherals. The initial outlay for a C-64 is considerably lower of course, but that's how the manufacturers get you hooked in the first place. Once they've got you hooked you'll keep on buying! To be honest, this applies to any hobby you care to mention, be it stamp collecting, photography or boating.

In the case of our Amigas we buy, or have bought, a 512K machine with one drive. A1000 owners have usually bought them including monitors. A500 owners will be able to buy the computer on its own with options for attaching it to a TV or Monitor. Only \$999.00 and you are in business! This is farcical of course because a TV set will never give you the resolution required, so back to your dealer and order your monitor. In round figures you will have spent \$1600.00.

So are you now up and running? Well, yes and no. First there's the printer. You don't need one? Well, why did you buy a computer which is particularly strong in the field of graphics? Perhaps you should have bought a PC. No, sooner or later you will buy a printer, so there goes another \$500.00.

And how about that single disk drive? A bit of a pain isn't it? Mind you, since the version 1.2 of our operating system the so-called RAM disk is easier to access so it is possible to live with a single drive, but sooner or later you will want to buy a second 3,5" drive, if only to make your life easier. However you may decide to opt for a 5,25" drive, because those 'old-fashioned' floppies are less than half the price of 3,5" disks. But make sure that you get an 80 track drive and not a 40 track one - the 80 track drives store the same amount of data as a 3,5" disk. (You won't find this item in many dealers - talk to your committee members regarding suppliers). Either way expect to part with another \$400.00.

Now, if you own some of the many useful application programs, you may well find that 512K of memory just isn't enough. Try DPAINT II for example in Hi-Res mode and see how many colours you can use --- you'll soon find out what I mean. A500 owners should soon be able to buy the 512K expansion for \$300.00. One way for A1000 owners is to have their Kickstart disk put into 'ROM'. This in turn frees up some 256K of memory, and allows you to fire up your machine that much faster. Cost of this operation is currently some \$150.00. Again talk to your committee for details.

Perhaps you read in our previous issue the bit about the S.A. company who sells memory expansion at what appear to be reasonable prices. There doesn't seem to be a great deal of difference in price between half a Meg (512K) or a full Megabyte of expansion, so if you feel you need it go for 1 Megabyte - about \$600.00.

But, and it is a big 'but', there's more to expansion memory than meets the eye. In fact it is an area that's fraught with pitfalls. Some varieties just won't work at all with your particular machine or won't work properly, particularly if you intend to hang other accessories (like hard drives) of the expansion board.

If you feel that you must have extra memory and aren't certain about what to get *ask somebody who knows for advice*. It can save you many hundreds of dollars.

The same goes even more for the real mass storage devices, the so-called hard disk drives. Here you can expect to pay several thousand dollars, so be extra careful with those little beauties - it can cost you very dearly!

So there you are - \$400.00 for an additional drive, \$500.00+ for a printer and from \$300.00 to \$600.00 for memory expansion, and we won't worry about hard drives for the time being! So you have to spend another \$1500.00 odd to get the best out of your Amiga if you are really serious. Now, they didn't tell you that in the advertising blurb, did they? However in the last resort all these nice 'extras' don't guarantee that you will get more enjoyment out of your machine, so don't despair if you just can't afford all these extra bits and pieces. Besides, if you have to wait longer they'll probably come down in price anyhow!

There are of course other and rather more specialized 'add-ons'. MODEMS for tele-communications are high in the list of popularity. Depending on features they will set you back between \$200.00 to \$2000.00. If you are really into sound you will need a MIDI interface (about \$100.00 - \$200.00), but that's only peanuts if you have a \$10.000 synthesizer hanging off the other end! Then there are PLOTTERS, another highly specialized accessory at highly specialized prices.

I haven't even talked about 'Sidecars', 'Transformers' and all the other bits to make the thing PC compatible. That, after all, is another story and outside the scope of this article.

My main reason for bringing these facts to your attention is that there appears a lot of confusion in these areas by our less 'technically-inclined' members (I am one of those!). I hope that, particularly in the area of memory expansion, we will get some input from our more experienced members, who are willing to pass on their knowledge to us ordinary mortals.

I would particularly caution against importing untried add-ons from overseas. That is one certain way to get your fingers burnt. Particularly in the field of memory expansion and hard disks there's a large amount of so-called 'vapour ware' - stuff that's advertised, but not in production. LEAVE IT ALONE! Unless you have read a review about the particular product, don't bother. In the latest issue of "A & J" (May/June '87) a US company called Techni-Soft who manufacture a memory expansion board (called "RAM-BO!"), come in for a caning - a bad product and bad service. So don't say that you haven't been warned!

In the meantime we invite our members to write to us if they have questions about expansion in all shapes and forms - but do give us details about your present equipment, as this can have an effect on items like memory expansion.

LIMITATIONS OF THE "PRT:" DEVICE

by Ralph De Vries

The "PRT:" device is a very neat way of implementing a universal system of printer codes which can be understood by a wide range of printers which are listed in PREFERENCES. However nothing is perfect in this world of ours, and the "PRT:" device is by no means perfect! Last year (Nov/Dec issue of CURSOR) Steve McNamee gave an outline how the PRT: device worked and included a list of all the Escape Codes used by our "universal" PRT: device. This listing can also be found in the booklet which accompanies the 'Enhancer Software, Version 1.2' on pages 21 - 23.

Although this list covers most features found on the majority of printers, it does not cover ALL features. As an instance my Citizen 120-D (an Epson look-alike) offers vertical enlargements of characters (ESC "h" or in Basic: CHR\$(27) ""11"). This is only one of several features not supported by a command in the PRT: device.

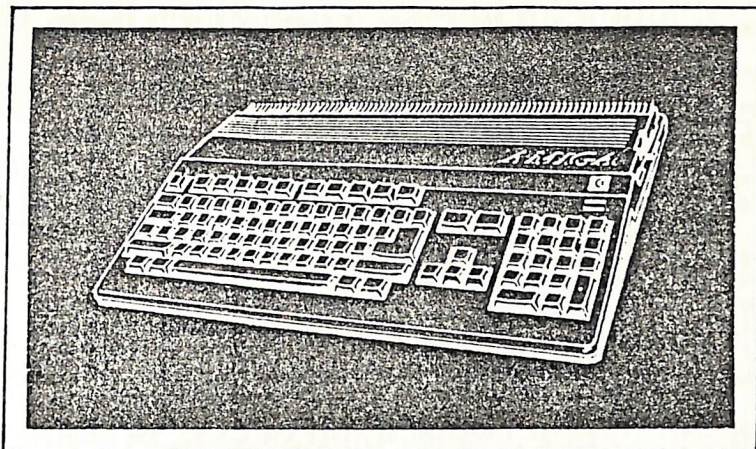
Another, rather more important, feature not supported is line spacing in steps of 1/216-inch steps (ESC "3" +n on Epson and IBM printers).

Well, I was not too concerned about these missing features, because up till recently I had no need or use for them. However some time ago my wife, who is a music teacher and uses lots of music manuscript paper, asked me to print out some manuscript paper as she had run out. In the past, in my '8-bit days', I had written a little Basic routine which allowed me to print out these sheets for her in an emergency. When I tried to write the same routine for her on my Amiga I then discovered that I needed to use that n/216-inch line spacing command which wasn't supported by the PRT: device. So, "sorry darling, can't be done". Needless to say there were some cracks about owning super computers which couldn't even do a simple job like that! The truth of the matter was that I couldn't be bothered trying to use the "PAR:" device, the alternative way of sending control codes directly to the printer (that is the control codes as found in one's printer manual - NOT the PRT: codes). End of the story so far.

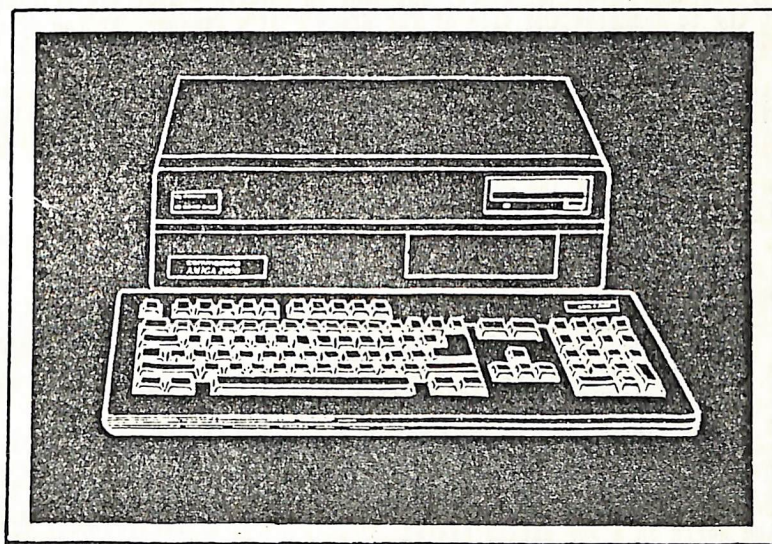
A few weeks ago I received a copy of the English "ICPUG" newsletter, in which Brian Fowler had exactly the same problem as I with trying to print music manuscript paper on an MPS 1000. He had taken the trouble of writing a little routine to print manuscript paper using the 'PAR:' device, so I copied his efforts, making the necessary changes in the code for my particular printer, and presto, my wife can have all the manuscript paper that she requires. Here follows the little Basic routine (annotated) to print manuscript paper for use by EPSON-like printers.

```
OPEN "par:" FOR OUTPUT AS 1      : ' talk direct to printer
PRINT#1,CHR$(27);"3";CHR$(16)    : ' ESC code for 16/216" line feeds
FOR k = 1 TO 12                  : ' we'll have 12 staves
  FOR j = 1 TO 5                  : ' of 5 lines each
    FOR i = 1 TO 78                :
      PRINT#1,CHR$(95);           : ' each line made up of 78 chars
    NEXT i                        :
    PRINT#1,CHR$(13)              : ' CR at end of each line
  NEXT j                          :
  FOR j = 1 TO 5                  :
    PRINT#1,CHR$(13)              : ' to separate staves
  NEXT j                          :
NEXT k                            :
PRINT#1,""                        : ' empty print buffer
CLOSE 1                          : ' & close file
```

THEY ARE HERE AT LAST!



THE AMIGA 500



THE AMIGA 2000

ABOUT THE C.E.S. AND COMDEX

An Interview with Royce Jones of Computer View in Bundamba

Ed: Royce, what was the main purpose of your trip to the USA?

RJ: To get a first-hand look at the computer scene in America.

Ed: Tell us a bit about the C.E.S and Comdex first.

RJ: Well, C.E.S stands for the Consumer Electronics Show, and this is held twice yearly - the Winter C.E.S., held in January and the Summer C.E.S., which this year was held from the 30th May till the 2nd June in Chicago. The C.E.S covers every form of Electronic consumables like Video, Radio, TV, Household appliances and yes, Home Computers! Comdex however is a computer and computer-related show only.

Ed: I believe that it was your intention to visit the C.E.S. only, and after the show spend a few days exploring the USA?

RJ: Yes, but I came a cropper! You see, Commodore wasn't exhibiting at the C.E.S.! It was their intention to do so, but they pulled out at the last moment and decided to exhibit at Comdex, which this time was held at practically the same time as the C.E.S., namely from the 1st June till the 4th June.

Ed: So, what did you do?

RJ: Well, as I was in Chicago I decided to visit the C.E.S., and despite Commodore's absence it was very worth while. After spending a few days at the C.E.S I moved on to Comdex.

Ed: Was that held in Chicago as well?

RJ: No, and that was the real problem. You see, Comdex was held in Atlanta, in Georgia in the other end of the USA. That killed off my sight-seeing plans!

Ed: Oh well, business before pleasure. But back to Chicago - what was it really like?

RJ: I won't try to describe the size of the place - it's immense. At the opening day they had 100.000 visitors. To really have a good look at all the computer related gear would take several days.

Ed: What was the 'big' computer news at C.E.S than?

RJ: PC (IBM) Clones without a shadow of a doubt. They were everywhere, and so was the software for them. Perhaps the most popular clone would be the 'Blue Chip' one made by Hyundai, the Korean company. Epson also had a new low priced clone on show to try to regain a larger slice of the clone market.

Ed: So no Commodore computers in sight there?

RJ: Oh yes, quite a few in fact on the stands of software companies. From 64's to the full range of Amiga's.

Ed: What about Atari?

RJ: Yes, they had a stand in Chicago, as well as in Atlanta, but I didn't get the impression that they were more popular than Commodore's Amigas. Another Atari line that didn't impress me was their new PC clone. It looked rather miserable.

Ed: Probably in keeping with their low pricing. But do you really think that the Amiga's are now as popular as the ST's?

RJ: Yes, and with the A2000 (now released) and the A500, Commodore will give them a real run for their money. However, as I said before, they don't sell anywhere near as well as the PC clones. It is claimed that percentage-wise Amiga is doing better in Canada, Europe, UK and Australia - in fact Australia has the largest user base of Amigas in the world on a per capita basis!

Ed: And what about the C-64's and the C-128's?

RJ: The C-64 is still by far Commodore's best seller. The C-128 is selling steadily, but I still didn't see the 128D's in the States.

Ed: And how about GEOS?

RJ: Selling very, very well indeed - several new packages to be released soon.

RJ: I was also very impressed with Commodore's new 1351 proportional mouse for GEOS (and other applications too, of course.)

Ed: Perhaps if GEOS was more realistically priced in Australia it would sell equally well. Did you see the C-64 memory expansion?

RJ: No, I didn't see it but I believe it is available. I did see an interesting accessory for the 64 and 128 though. It's called an 'lcontroller', released by Suncom. It's a type of fixed joystick which clamps on the bottom right corner of the computer and has been more or less specifically designed for use with GEOS.

Ed: (looking at an illustration of the lcontroller) - Yes, it looks like a very interesting accessory. What about other 64 or 128 accessories?

RJ: Hard Disk Drives - I saw the Lt. Kernal 20MB drive in operation on a C64. It seemed to work very well. They also have a File-Server for this one which will allow you to hook up to 8 64's or 128's to this drive. Another company, Phoenix Electrics had 10, 20 and 40MB hard disk drives for the 64's and 128's. Cost here in Australia could be a problem though.

Ed: So, after your stint at C.E.S. you rushed off to Atlanta to catch Comdex?

RJ: Yes, because for the first time ever these two shows overlapped, so it was a case of 'out of one and into the other'.

Ed: Is Comdex purely a business computer show?

RJ: No, not altogether - there's still plenty to see for the home user, although Commodore chose to show only their PC range and the Amiga family.

Ed: Any comments on their stand?

RJ: It was quite a large stand with huge Amiga banners coming from the ceiling. Although all the big names were there like IBM, Apple, Atari etc. I'd say, without being too prejudiced that Commodore's was one of the busiest stands at the show.

Ed: I take it that all the software- and hardware developers were there as well?

RJ: Oh, yes - in full force. In fact I had the opportunity to talk to quite a few company representatives, which is better than going through distributors etc.

Ed: Anything that stood out?

RJ: Some very nice Colour printers/plotters, but priced way beyond most peoples budget. In general most high quality printers are still too expensive. (On showing me a OS Commodore brochure): Note that the MPS 1200 printer is now renamed a MPS 1250 printer? Well, Commodore are going to market this version which has both a Commodore Serial port as well as a Centronics port, thus making it suitable for use with all Commodore's computers. I'd also like to point out the quality of Commodore's US leaflets, or rather more a booklet really with information about third part's products.

Ed: Yes, very nice - I notice they mention the new Amiga WordPerfect in there.

RJ: Indeed, it is now very close to being released. (\$US395.00 RRP) What with file interchange between the Amiga and IBM versions it should be a winner.

Ed: From information supplied it seems indeed to be an extremely powerful program. What about the other Amiga word processor/desktop publishing program, Vizawrite?

RJ: A gentleman from the UK (its country of origin) was demonstrating it. It is ready for distribution, but for one thing, the manual hasn't been printed yet! I've also got some news from the manufacturer of PROWRITE, the desktop publishing program. If anybody has a copy of this program they should make a backup for present use and send their original back to the manufacturers in the USA and they will receive free of charge a revised program disk which now includes a low-res version of the program, thus eliminating screen-jitter. I also was supplied by the manufacturer with a copy of "Publisher 1000", a new desktop publishing program, which I feel is somewhat easier to use than PageSetter.

Ed: So that promises well for the near future.

RJ: Yes, indeed. I'm glad that I went, because it's certainly an experience not to be missed, but all the same I'm glad to be back in Australia again.

Ed: You certainly seem to have learnt a bit. How about Hanover in Germany next year?

RJ: Well, you never can tell.....

A USEFUL 'C' PROGRAM

by Steve McNamee

Since I first started using my Amiga I have continually had the impression from talking to other users, that one of the most annoying aspects of only having one disk drive, is the frustration of always having to reboot the computer when ever running a new program that expects to be on a Workbench disk. I have always thought that the Amiga's operating system should never have been restricted to a single drive. Either the machine should have come standard with 2 drives OR the operating system should have been made much less disk dependent. Be that as it may, we are stuck with it as it is, most people opting for a second drive; but what of the poor suckers who either can't afford, or don't want to buy a second drive?

The other main problem with the use of one drive is the continual swapping of disks needed to do even fairly trivial tasks. This problem can be mostly overcome by using Version 1.2 of the operating system and intelligent use of the RAM: disk, which is really quite powerful and fully supported under the enhanced system. Workbench disks are available from the library that do all this for you automatically.

Here now I present a little utility that will take care of the other problem of having to reboot a disk in order for it to be recognised as the Workbench. It is written in 'C' which language seems to be the defacto standard for the Amiga. It has been a continual source of amazement to me that so many people seem reluctant to learn this language or consider it difficult. There are actually only about 30 Keywords in the entire language and you don't even need to use all of them to write functional code. I suspect that most people take one look at Kernigan & Ritchie and through up their arms in disgust. I think that these people have missed the point; that K&R assumes you are an Electronics Engineer/Whiz Programmer/All Round Guru etc. and aims its material at this level. To learn 'C' you should find one of the many good books on 'C' around that assume you know very little about anything. When you have progressed to the point where you are comfortable with the language and are starting to write useful code, THEN attack K&R, because it undoubtedly IS the BIBLE on 'C'.

Anyway on to the nitty gritty of how to use the thing, for I am sure that there are many of you out there in Amiga Land who think that I am talking a lot of Dingoes Kidneys, that 'C' is probably harder to learn than Martian and only want to use the utility to stop themselves attacking their Amiga with a low yield thermonuclear device! This is fine, but for you hardy souls who wish to delve a little deeper, I will discuss the innards of the program later on in the article.

Using the utility is simplicity itself. Simple drag the Icon from the library disk into the RAM: disk. Now one by one insert each disk that you normally boot as a workbench and drag the Icon from the RAM: disk to your disk. Now whenever you wish to change Workbenches simply insert the new disk and click on the Icon for this utility - called funnily enough 'MAKESYS'. From then on the poor confused Amiga will think that you actually booted up with that disk. This program is available on both of the customised Workbench disks in the Software library.

A few notes are worth mentioning:

1. The disk you make into a workbench must have the following directories present or the program will abort - C L DEVS S LIBS and FONTS. Note that the directories don't necessarily have to have anything in them but they MUST be present. I.e. you could delete all the fonts to save room if a program doesn't need them but the empty directory must still be present.

2. You must not have been mucking around with 'Assign' and deleted any of the standard logical devices assigned when the system first boots. If any are missing 'MakeSYS' will abort. If you have 'Assigned' any other directories to the disk you are replacing they will remain current; if you reference them you will be prompted for the old disk. This won't happen for any of the standard assigns, only ones you do yourself. You can make any Assigns you like as long as you don't fool with the following - C: L: DEVS: S: LIBS: and FONTS:. If you don't play with CLI the situation will never occur.

Now for all you gurus (or apprentice gurus) I'll go through the code and point out some interesting tourist attractions. Listing 1 shows the program and I will refer to various line numbers as I go along, but for the un-initiated remember - that 'C' is a structured language and has no line numbers. They are there purely for reference and if any one is masochistic enough to type the code in, you should leave out the line numbers. The source code is available on CCUG LIB 1 and will also be available on the club BBS in the 'Amiga Progs' section of DOWNLOADS. The program was compiled using the Manx compiler version 3.4a but should run OK on the earlier version and also on the 'Lettuce' compiler, with 1 caveat - I haven't tried it so minor mods may be necessary. ****Note**** The new Lattice compiler version 3.10 is rumoured to be much less prone to producing salad, providing many improvements over V3.03 which the club has a copy of. We have sent away for the upgrade to V3.10 but I don't know when that will arrive.

Down to line 34 should be self explanatory. Lines 39-44 introduce one of the more powerful facets of 'C', the pre-processor. Any line beginning with a '#' character is used by the pre-processor to do such things as define macros, include files and define labels. In this case I am including 2 standard header files and defining some global constants. The two defines at lines 42-45 are simply used to save typing; I am basically lazy. Lines 48-50 declare a couple of variables that need to be visible to all functions. From there down to line 150 are my function declarations. For you Pascal programmers these are analogous to Procedures. The function message() at line 53 prints any messages on whichever window is opened in main(). The function finddevinfo() at line 64 does a lot of the hard work in this utility. Basically (Pun intended) what it does is open the DOS library and use this as a base to traverse various system structures to find the DOS DeviceList. Once the list has been found it is scanned for the named logical directory which was passed as the function's only parameter. If the desired name is found a pointer to that DeviceList structure is returned else a NULL pointer is returned.

Line 151 brings us to the start of our main() function. ALL 'C' programs must have a main() function and this is where our code starts from. Lines 155-165 declare some local variables and arrays and clears them where needed. Lines 166-185 decide whether we are running from CLI or workbench and opens the appropriate window. This idiosyncrasy seems to be a major stumbling block for beginning Amiga 'C' programmers. If a program is started from the Workbench there is no current window (denoted by #) and any use of console I/O such as printf() and getchar() will end up in Limbo. The easiest way to recognise that a program has started from Workbench is to test the argument 'argc' to main(). If this is 0 then we came from Workbench for if we came from CLI argc would be at least 1. If we came from Workbench we must open our own window and perform our own console I/O. Lines 186-190 are there to pamper my ego. The rest of the code is fairly heavily commented so I won't bore you with a rehash of the comments. I will however mention the absolute necessity of using forbid() and permit() whenever fooling around with system lists. Because of the true multitasking nature of AmigaDOS you NEVER know when the processor is going to be whisked out from under your feet and given to another task. If this happens while you are half way through scanning a list and some other task has altered this list, all your node pointers are probably now pointing at the 68000 equivalent of Galactic Centre; a spectacular GURU is the almost certain result!

LISTING

```
1 : /*****
2 :
3 : PROGRAM:      MakeSYS.C
4 : VERSION:      1.1
5 : DATE:         4/7/87
6 : AUTHOR        Steve McNamee
7 : USE:
8 :
9 :      This little utility was hacked up to allow single drive users
10 :      to insert a new system disk and not have to reboot the
11 :      computer. It simply reassigns all the directories that are
12 :      important to AmigaDOS to the disk that is in drive DFO: at
13 :      the time the program is run. To use copy the utility on to
14 :      every disk that you normally have to boot. Then when you wish
15 :      to use the disk just click on the icon and the Amiga will
16 :      then happily think that the disk is it's boot up disk.
17 :      For this utility to work properly the disk in drive DFO:
18 :      must have all the standard workbench directories viz.
19 :
20 :                               L
21 :                               LIBS
22 :                               S
23 :                               C
24 :                               DEVS
25 :                               FONTS
26 :
27 :      It can be run from either the CLI or Workbench.
28 :      This code was compiled with Aztec C V3.40a, minor
29 :      mods may be needed for other compilers.
30 : *****/
31 :
32 :
33 :
34 :
35 : #include      <stdio.h>
36 : #include      <functions.h> /*Aztec Amiga function declarations*/
37 :
38 :
39 : #define VERS   "1.1"
40 : #define DATE    "4-July-87"
41 : #define NUMDEVS 7 /* Number of directories to reassign*/
42 : #define prtstr Write(confp,print_buffer,(LONG)strlen(print_buffer));
43 : /* dump the buffer to the console */
44 : #define getent Read(confp,print_buffer,1L);
45 : /* Wait for the ENTER key to be pressed */
46 :
47 :
48 : /* these vars need to be globally available */
49 : struct FileHandle * confp; /* AmigaDOS file handle */
50 : char print_buffer[255];
51 :
52 :
53 : void message(str) /* print a message on whichever window is open*/
54 : char * str;
```

```

55 : {
56 : sprintf(print_buffer,"%s",str); /* print string to the buffer*/
57 : prtstr                               /* dump buffer to the window*/
58 : }
59 :
60 : /* This function scans the system DeviceList list for an entry
61 : with the name supplied. It returns with either the pointer of
62 : the DeviceInfo structure or NULL if the name could not be found.
63 : */
64 : struct DeviceList * find_devinfo(name)
65 : char * name;
66 : {
67 :
68 : /*the following are all pointers to AmigaDOS system
69 : structures which have to be traversed to find the
70 : DeviceList list.
71 : */
72 : struct DosLibrary * dl;
73 : struct RootNode * rn;
74 : struct DosInfo * di;
75 : struct DeviceList * curdl,* nxtdl; /*pointer to current node
76 : and next node*/
77 :
78 : char * bname; /*pointer to BCPL string with node name */
79 : int i,flag,namelen;
80 :
81 :
82 : /*Open the DOS library which gives us the place to start our search*/
83 : if (!dl=(struct DosLibrary *)OpenLibrary("dos.library",0L))
84 : return((struct DeviceList *)0L);
85 : /* spit out the dummy if we can't find it*/
86 :
87 : rn=(struct RootNode *)dl->dl_Root;
88 : /*get the pointer to the DOS RootNode*/
89 : CloseLibrary(dl);
90 : /*once we have it we don't need the DOS library
91 : any more so we close it*/
92 : di=(struct DosInfo *) (BADDR(rn->rn_Info));
93 : /*pointer to info substructure*/
94 :
95 : /******
96 : NOTE: BCPL pointers have to be converted
97 : to standard C pointers before they can
98 : be used. The macro BADDR() in dos.h does
99 : this for us.
100 : *****/
101 :
102 : curdl=(struct DeviceList *) (BADDR(di->di_DevInfo));
103 : /* first entry in the DeviceList list*/
104 : if (curdl==NULL)
105 : return((struct DeviceList *)0L);
106 : /*if there is no list throw a tantrum */
107 : namelen=strlen(name)-1;
108 : /*so we don't try and compare beyond the end*/
109 :
110 : for (;;) /*loop forever*/

```

```

111 :      {
112 :          nxtndl=(struct DeviceList *)(BADDR(curd1->dl_Next));
113 :          /*get address of next node*/
114 :          bname=(char *)(BADDR(curd1->dl_Name)); /*node name*/
115 :          flag=TRUE;
116 :          for      (i=0;i<bname[0];i++)
117 :              /* compare for the length of the BCPL string */
118 :              {
119 :          /* if a character (all folded to upper case) does not match
120 :          or we reach the end of the name we are searching for they
121 :          must not match so set the NOT FOUND flag and stop
122 :          */
123 :              if      (toupper(bname[i+1]) != toupper(name[i]))
124 :              {
125 :                  flag=FALSE;
126 :                  break;
127 :              }
128 :              if      (i > namelen)
129 :              {
130 :                  flag=FALSE;
131 :                  break;
132 :              }
133 :          }
134 :          if      (flag==TRUE)
135 :              /*if we got all the way through without
136 :              setting the flag the strings must match*/
137 :              return(curd1); /*so return address of that node*/
138 :
139 :          if      (nxtndl==NULL)
140 :              /*see if we've reached the end of the list*/
141 :              return((struct DeviceList *)0L);
142 :              /*if so return NO MATCH*/
143 :
144 :          curd1=nxtndl;
145 :          /*set up the pointer and loop back for another*/
146 :      } /* end of for */
147 :
148 : } /* End of find_devinfo() */
149 :
150 :
151 : main(argc,argv)
152 : char   * argv[];
153 : int     argc;
154 : {
155 :     int     i;
156 :     struct  Lock   * locks[10]; /*holds all the locks we get on
157 :                                the new disk*/
158 :     struct  DeviceList * dls[10]; /*holds all the pointers to the
159 :                                DeviceList nodes we want to reassign*/
160 :     struct  MsgPort * proc; /*pointer to handler process for DFO*/
161 :
162 :
163 :     for      (i=0;i<NUMDEVS;i++) /*clear all the Lock pointers*/
164 :         locks[i]=NULL;
165 :
166 :     if      (argc==0) /* if running from CLI argc will allways be at

```

```

167 :          at least 1, since even if a command has no
168 :          arguments the command name is always passed
169 :          as the first argument. If argc is 0 we must
170 :          be running from workbench. */
171 :      {
172 :          /* If we are running from workbench we must open our own
173 :          window to do any console I/O */
174 :          if ((confp=Open("CON:100/40/400/120/WorkBench",
175 :                          MODE_OLDFILE))==NULL)
176 :              exit(30L);
177 :      }
178 :
179 :  else
180 :      {
181 :          /* if running from CLI we can use the current CLI window. */
182 :          if ((confp=Open(";",MODE_OLDFILE))==NULL)
183 :              exit(20L);
184 :      }
185 :
186 :  message("\nMakeSYS          Version ");
187 :  message(VERS);
188 :  message("\nBy Steve McNamee  ");
189 :  message(DATE);
190 :
191 :  if ((proc=(struct MsgPort *)DeviceProc("DFO:"))==NULL)
192 :      {
193 :          /*find a pointer to handler process for DFO: */
194 :          message("\nCould not find Process for DFO:\n\n");
195 :          goto procerr;
196 :      }
197 :
198 :  /* Here we try to obtain a lock on all the directories we will need.
199 :  If we don't get them all we abort after first unlocking any we
200 :  managed to obtain. As we get them we store them in an array so we
201 :  can use them later.
202 :  */
203 :  if ((locks[0]=Lock("df0:",ACCESS_READ))==NULL) goto lockerr;
204 :  if ((locks[1]=Lock("df0:c",ACCESS_READ))==NULL) goto lockerr;
205 :  if ((locks[2]=Lock("df0:devs",ACCESS_READ))==NULL) goto lockerr;
206 :  if ((locks[3]=Lock("df0:l",ACCESS_READ))==NULL) goto lockerr;
207 :  if ((locks[4]=Lock("df0:libs",ACCESS_READ))==NULL) goto lockerr;
208 :  if ((locks[5]=Lock("df0:fonts",ACCESS_READ))==NULL) goto lockerr;
209 :  if ((locks[6]=Lock("df0:s",ACCESS_READ))==NULL) goto lockerr;
210 :
211 :  /* Now we have to make sure we can find a node in the DeviceList
212 :  list for each logical device we wish to reassign. If we can't find
213 :  them all we abort, releasing all the locks we obtained previously.
214 :  */
215 :
216 :  /* This part is important. Whenever you are fooling around with system
217 :  lists you should always turn off task switching. If you dont your task
218 :  can be taken from you at any moment. If some other task changes the
219 :  list and you then get the processor back again while half way through
220 :  the list which is now almost certainly different from when you were
221 :  pr-empted. A guru is nearly always the result.
222 :  */
223 :  Forbid();          /*turn off task switching*/

```

```

223 :
224 : if      ((dls[0]=find_devinfo("sys"))==NULL) goto lockerr;
225 : if      ((dls[1]=find_devinfo("c"))==NULL) goto lockerr;
226 : if      ((dls[2]=find_devinfo("devs"))==NULL) goto lockerr;
227 : if      ((dls[3]=find_devinfo("l"))==NULL) goto lockerr;
228 : if      ((dls[4]=find_devinfo("libs"))==NULL) goto lockerr;
229 : if      ((dls[5]=find_devinfo("fonts"))==NULL) goto lockerr;
230 : if      ((dls[6]=find_devinfo("s"))==NULL) goto lockerr;
231 :
232 : /* If we got here everything must have been OK so
233 : now we make all the reassignments.
234 : */
235 : for      (i=0;i<NUMDEVS;i++)
236 : {
237 :     Unlock(dls[i]->dl_Lock); /*first unlock the old directory
238 :                             because if we don't it will hang
239 :                             around forever tying up memory*/
240 :     dls[i]->dl_Lock=(BPTR)locks[i];
241 :     /*replace the old lock with the new one*/
242 :     dls[i]->dl_Task=proc; /*finally the process pointer*/
243 : }
244 : Permit(); /*its now safe to turn task switching
245 :           back on*/
246 : goto      finis; /*all done*/
247 :
248 :
249 : lockerr:
250 :     /* If any of the directories could not be locked, or
251 :     any of the DeviceList pointers found, we tell the
252 :     user a story and pause while he reads it */
253 :
254 : message("\nCould not find all required directories or");
255 : message("\nall required entries in the assign list.");
256 :
257 : procerr:
258 : message("\n\nPress RETURN to continue.\n");
259 :
260 : getent /* wait for the ENTER key */
261 :
262 : for      (i=0;i<NUMDEVS;i++)
263 : {
264 :     if      (locks[i]==NULL)
265 :         continue;
266 :     Unlock(locks[i]); /*Unlock any locks we got*/
267 : }
268 :
269 : finis: /* all is well */
270 : Close(confp); /* close the console */
271 :
272 : /* ... and fall off the end! */
273 :
274 : } /* End of main() */
275 :
276 : /* EOF MakeSYS.C */
277 :
278 :

```

STARTUP - SEQUENCE

An Irregular Beginners Column

Single-drive systems

Amiga owners with only a single drive may, by now, be discovering many of the problems associated with such a system.

Many of the essential files and programs used by the system are contained on the WorkBench disk and these will need to be accessed at various times, sometimes apparently unpredictably.

In general, the solution is to copy the WorkBench disk (deleting any unwanted files) and include on this copy your own software. In my case, my main WorkBench disk has had AmigaBASIC copied to it, and the CLI icon put into the initial window.

The biggest problem so far encountered is the use of CLI commands to access a second disk (perhaps a library or FLASH disk). In this case, a special feature of the CLI commands needs to be used. Let's start with an example - you've just booted the system with WorkBench and entered the CLI and you now want to see the directory of another disk.

The DIR command is fairly straightforward and if you typed DIR after the CLI prompt '1>' you'll get a summary directory of the WorkBench disk. In a two drive system, getting a directory of another disk is quite simple - you simply use DIR DF1:, where the second disk is in the external drive, DF1:

With a single drive, you need to invoke the DIR command, and then hold it until you've changed disks. This is actually quite simple, since all CLI commands have a form which produces a prompt for the command's parameters. This is done by simply adding a '?' following the command - therefore, to look at the directory of the second disk:

DIR ? (note there's a space between DIR and ?)

you'll then get an odd-looking prompt (actually a guide to the parameters needed) at which point you put the second disk in the drive, and type DF0: at the prompt.

This type of procedure can be used for all commands, such as LIST, TYPE, CD and so on. However, it is a little tedious having to swap disks in this way. If you have a 256k system, then you'll have to live with the problem.

If you've a 512k system, then it is possible to transfer these commands into RAM at startup, and thereafter the Amiga will rarely need to access the WorkBench disk.

The mechanism to do this is as follows:

```
MAKEDIR RAM:C
COPY DF0:C TO RAM:C
CD RAM:C
ASSIGN C: RAM:C
```

This sequence can be included in the startup-sequence and will therefore execute automatically on booting up. Use ED to edit the file (format is ED S/STARTUP-SEQUENCE - and finish with ESC X).

It may be useful to try and explain what all this is doing.

MAKEDIR RAM:C - this creates a 'C' directory in RAM:, at the same time as initialising the RAM-disk (this initialisation normally occurs only on the first access to the RAM-disk and requires the Ram-Handler software that you will find in the L directory of the WorkBench disk).

COPY DF0:C TO RAM:C - this copies the entire contents of the WorkBench 'C' directory (in other words, all the commands) into the RAM:C directory. This takes a little while and, if you preferred, individual commands could be copied by using commands like

```
COPY DF0:C/DIR TO RAM:C
```

CD RAM:C - this ensures that RAM:C is the current directory and will prevent accidental access to the WorkBench disk. You can change the current directory at any time using the CD command.

Finally, ASSIGN C: RAM:C ensures that any attempt by the system to access the C: directory (which is different to the ordinary C directory in as much as C: is actually defined initially as the boot-up disk's C directory) will go to the RAM:C directory and not the WorkBench C directory.

Now, any command typed will be executed from RAM: and not disk.

Printers PAR: & SER:

Normally, anything you want to go to the printer is sent to the device name PRT: (for instance TYPE > PRT: FILENAME will type the contents to the printer). In fact, PRT: can either be on the parallel or serial port, and operates according to the printer you set up in Preferences.

Whenever this is accessed, a reset command sequence is sent to the printer which can have disrupting effects under certain circumstances.

However, if you direct the output to PAR: or SER:, this does not occur, and the printer will stay in its last set-up mode.

I mention this because, when trying to do some listings, I selected condensed mode on my EPSON MX100 (by having a file with the single character - ASCII 15 - and using the TYPE command to send it to the printer) only to find the printer refused to stay in condensed mode.

I then used the PAR: device instead of PRT:, and all was well.

As an additional point on printers, I was using Aegis-DRAW and trying to use the EPSON HL-80 plotter. I had selected the EPSON printer driver in Preferences, but it took a long time to realise that the total lack of co-operation from the plotter was due to an inappropriate reset sequence being sent to it.

All I had to do in this case was to change Preferences to the GENERIC printer, and no reset sequence was invoked.

The significance of the printer drivers as provided on the WorkBench disk (in the DEVS/PRINTERS directory) is that the Amiga uses an internal character sequence for many special print functions.

For instance, "ESC [4 m" selects underline-on (try it in the CLI, simply press ESC key, followed by '[4m' and anything thereafter will appear underlined) - "ESC [0 m" will restore it to normal) and all similar character sequences are intercepted by the printer driver and converted into the code required for the specified printer.

There are several codes like this, but not all will work when typed at the CLI - those that WILL work are as follows (NB: It is assumed you have pressed ESC key first and the case of letters is important):

- c clear screen
- [0m reset screen characters
- [1m boldface ON
- [3m italics ON
- [4m underline ON
- [3xm character colour to x (see note below)
- [4xm background colour to x (see note below)

when setting character or background colour, 'x' determines the colour used. With the normal WorkBench colours the colours are:

x=0	BLUE	x=2	BLACK
x=1	WHITE	x=3	ORANGE

So to set BLACK characters, use "ESC [3 2 m".

The articles on this page and the previous two pages have been taken over from the English I.C.P.U.G. Newsletter. The initials stand for Independent Commodore Products User Group, who have a membership running into thousands. Every two months they issue their newsletter, which runs close on to 120 pages. They cover the full range of Commodore products and are renowned for their hardhitting articles. Many famous English Commodore 'gurus' contribute to this newsletter. In a recent issue one of our Presidents's articles on 'Problems with the 1571 Disk Drive' was featured, which made them pass the comment that "Greg Perry should be awarded the equivalent of the computer version of the Sherlock Holmes of the Year award". High praise indeed!

MAIL BOX

{Those of you who read last month's letter from Mr. John Howard, extolling the virtues of Word Processing and Amiga ownership, will be pleased to read this further literary contribution to our Mail Box page.}

What can one say in the circumstances, to a dedicated, enthusiastic, hardworking Newschief, except of course, 'compose yourself'?

As to the name, it is possible that you may have heard it before in a different context. Rumour has it that there is another of the same, south of the border. It's a burden I have to carry. But wouldn't you agree that politics should not spoil an otherwise excellent mag?

Please convey grateful thanks to those who took the trouble to point out the non-sequiturs, the errors in syntax (are they taxing that now?) and the one spelling mistake in previous correspondence.

The intrusions are regretted. You know how it sometimes is. I was looking for the "f" numbers for SNAPSHOT under the WORKBENCH and would you believe, I couldn't find any? Do you think they might be in CAMERA under TEXTCRAFT?

Since last writing, the Backspace and the Delete keys have been discovered and I am tempted to do some of my own editing. But it is comforting to us tyros, to know that you have generously offered to knock received articles into shape.

John Howard

Fair go, mate! This literacy bit is going a bit to your head now, isn't it? Far too many big words for us computer - literates (and - illiterates). Sounds to me as if you got hold of an advance copy of WordPerfect, with its 115000 words spelling chacker and on-board Thesaurus! You are getting too clever by far.

However, back to your letter. Thanks for your compliments, but that won't give you preferential treatment in this column, you know! As for politics in this newsletter, we find that the Commodore politics are already more than most of us can cope with, so no worries on that score.

As for your third paragraph, I'm completely non-plussed. Was there a spelling mistake in your previous epistle? Sorry about that slip-up on my part.

Now as for your fourth paragraph, I'm afraid that you still have to learn a bit about Search and Replace functions etc, as this paragraph was obviously intended for a letter to "Australian Photography" magazine. Fortunately I do have a photographic background, so hopefully I can assist you. People who take SNAPSHOTS never bother with "f" numbers (thanks to Kodak, Polaroid etc.). CAMERAS should not be stored under WORKBENCHES!!! However feel free to shove TEXTCRAFT under any WORKBENCH you may care to mention. (TRASHCAN isn't a bad place either!)

I am pleased to see that you have discovered a few extra keys on your keyboard. Have you thought of either down- or upgrading to these new-fangled A500 or A2000 machines? I've been told that they have an extra six keys on the keyboard. Think of the extra fun-ctions you can have at your disposal!

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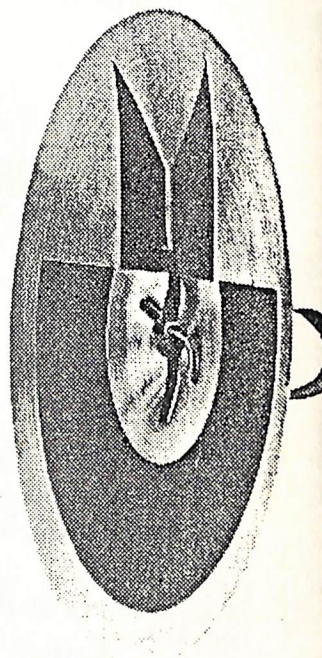
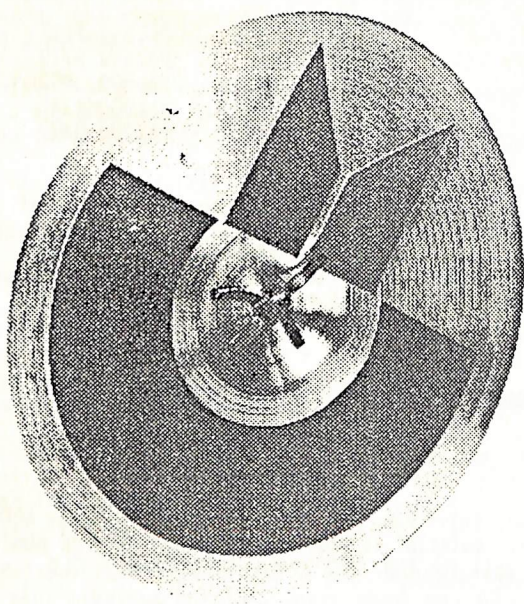
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